DThese are comments to CTIA's ex parte presentation to the FCC on October 24, 2002.

CTIA states:Hearing aid interference is the root problem and is not specific to wireless telephones: This is not entirely true. Even if hearing aids were made immune to RF interference those hearing aid users who who must use telecoils would suffer from the magnetic fields generated by the pulsing battery current in the telephone's battery and associated wiring from the battery to the telephone's electronics. This has been discussed in some of my comments and reply comments as well as comments to ex parte communications.
CTIA also states: HAC can provide inductive coupling only to the 20% of hearing aids that have T-coils. While this is true, there were pobably less than 20% when Congress passed the HAC act for wire line telephones so this argument is not viable.
They also state HAC cannot fix the problem of interference. Use of the directional Antenna as proposed by DAMAX and demonstrated to the FCC Engineers can solve the problem of RF interference generated in the hearing aid due to RF pickup, demodulation and amplification in the hearing aid since the RF is directed away from the hearing aid. DAMAX also in their comments provided spectrum analysis made by Starkey Laboratories that prove that the interference can be lessened by 35dB which makes digital cellular telephones useable with the hearing aids in the microphone mode.
It is further believed that the antenna could be retrofitted into phones already on the market. Has CTIA investigated this DAMAX directinal antenna?

CTIA states that manufacturers design and build phones on global platforms that cannot be easily or guickly modified. The same type of internal coupling that has been used in analog telephones could be utilized or even a magnetic type of speaker instesd of a piezo electric type could be used and its magnetic leakage will probably suffice to provide the necessary coupling even if a multi turn coil around the speaker is necessary to strengthen the magnetic field. This argument is not convincing to any electronics engineer.

CTIA also states that consumers have options such as T-coil accessories devices such as loop sets. Such accessories are cumbesome to use as they can not be continuously worn and if the phone rings the party calling will probably hang up before the loop set can be in operation. In addition they are expensive and costly in addition to an already expensive telephone.

Bluetooth is not at this time available and it is believed that it will be many years before it will be suitable for use in hearing aids and should not be considered a viable solution to making hearing aids compatible at this time.

CTIA offfers several solutions to hearing aids but completely ignores the interference caused by the pulsing magnetic fields causing interference to the telecoils in the hearing aids. There is a solution to this interference problem which is completely ignored by telephone manufacturers. The solution using self cancelling techniques was demonstrated to FCC personnel in April 2002.

In conclusion, using induction coupling developed for use with analog wireless telephones, incorporating directional antennas and lessening the generation of magnetic field causing interference to the telecoil can make digital wireless telephones HAC now so there is no reason why the exemption to wireless telephones from the HAC Act should not be revoked. The FCC is respectfully requested to do so at this time. The NPRM has been in place for nearly two years already and it is time some action is taken to revoke the exemption.

Sincerely,
George DeVilbiss